

# Adaptation Finance

## Sources, Mainstreaming and Innovative Approaches

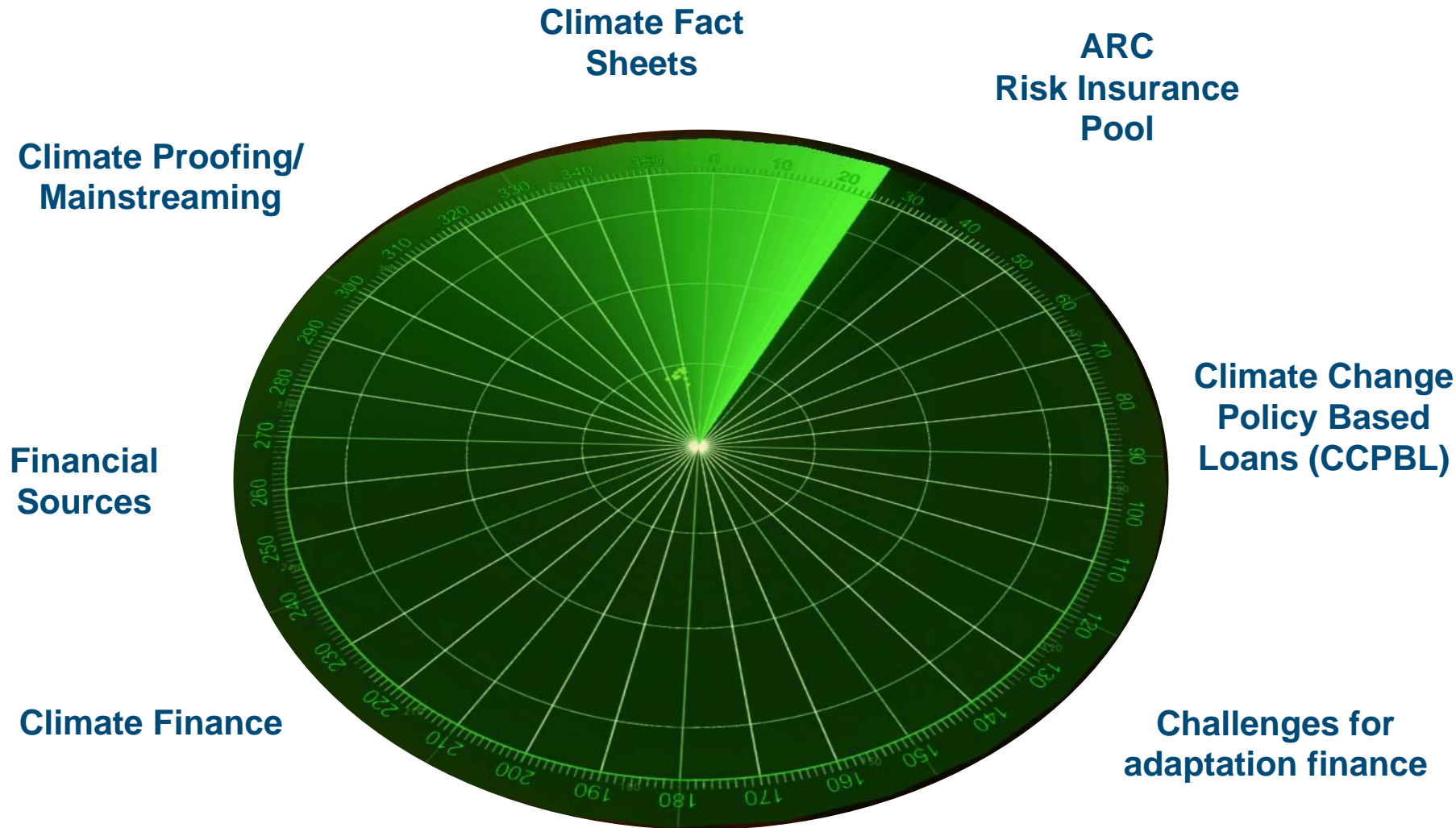
KfW-Side event: Progress in Adaptation to Climate Change

UNFCCC-SB36, Bonn  
Room “METRO”  
21 May 2012

Die Zukunftsförderer



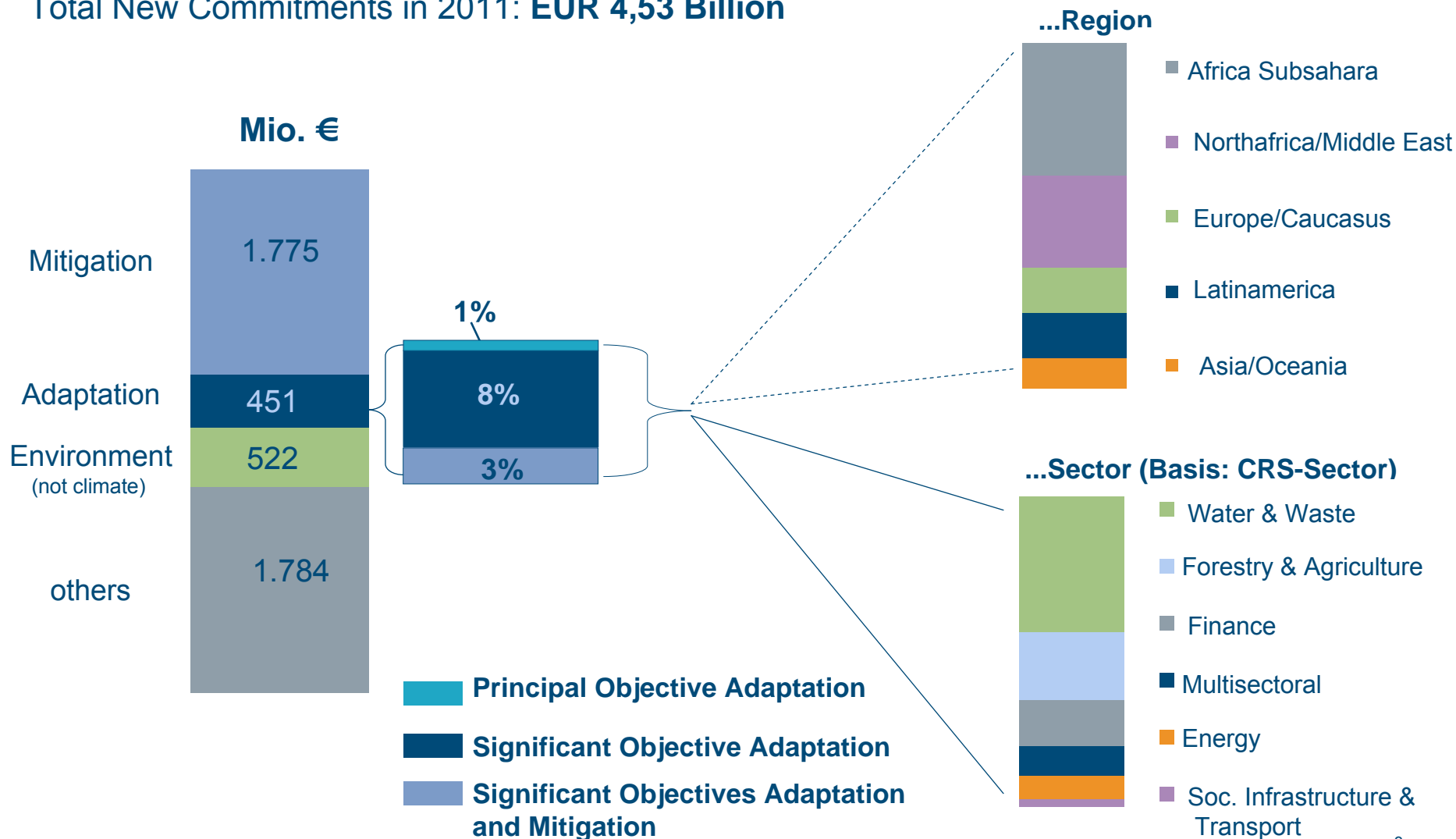




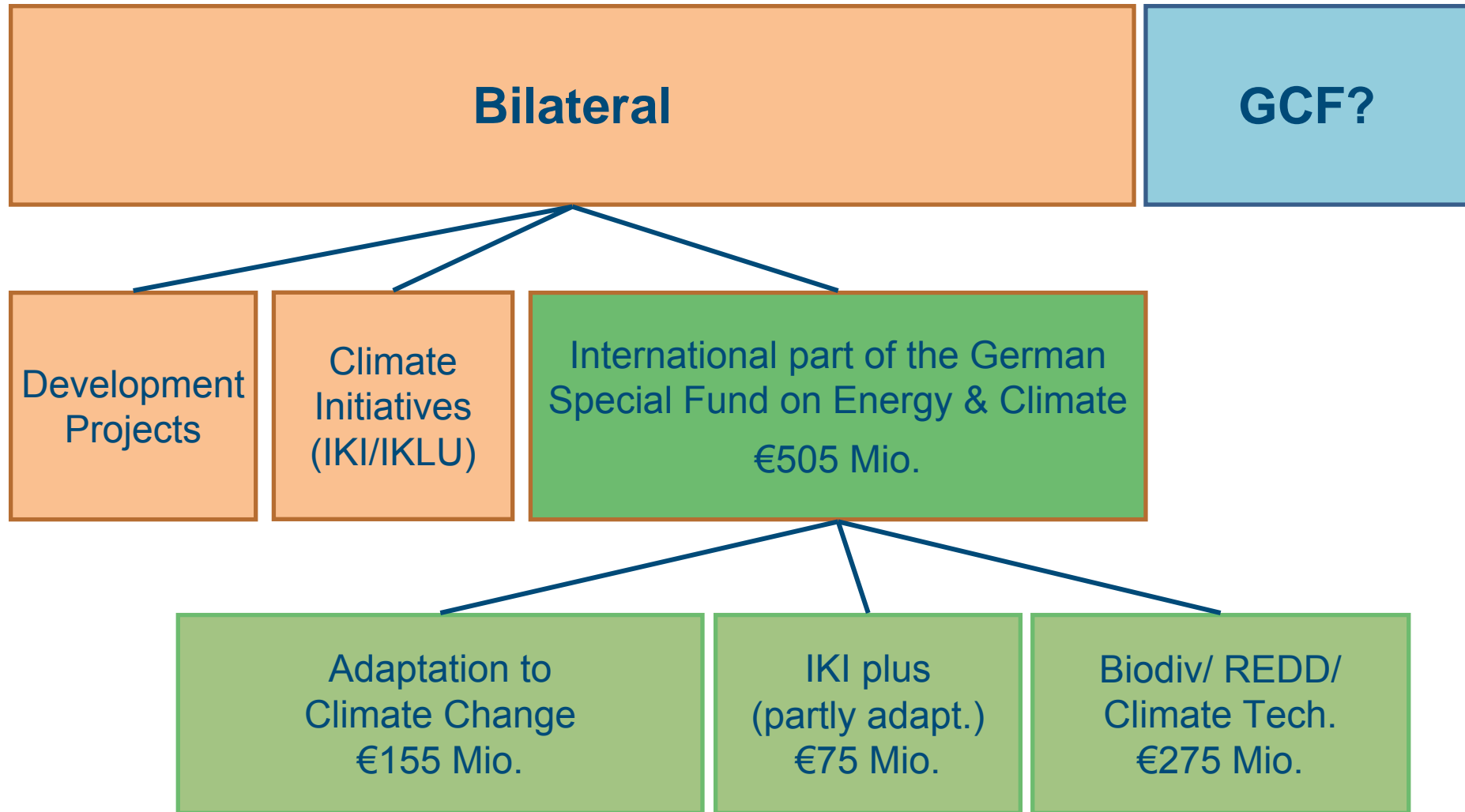


# Environment and Climate Finance of KfW - Adaptation Finance by Sector and Region

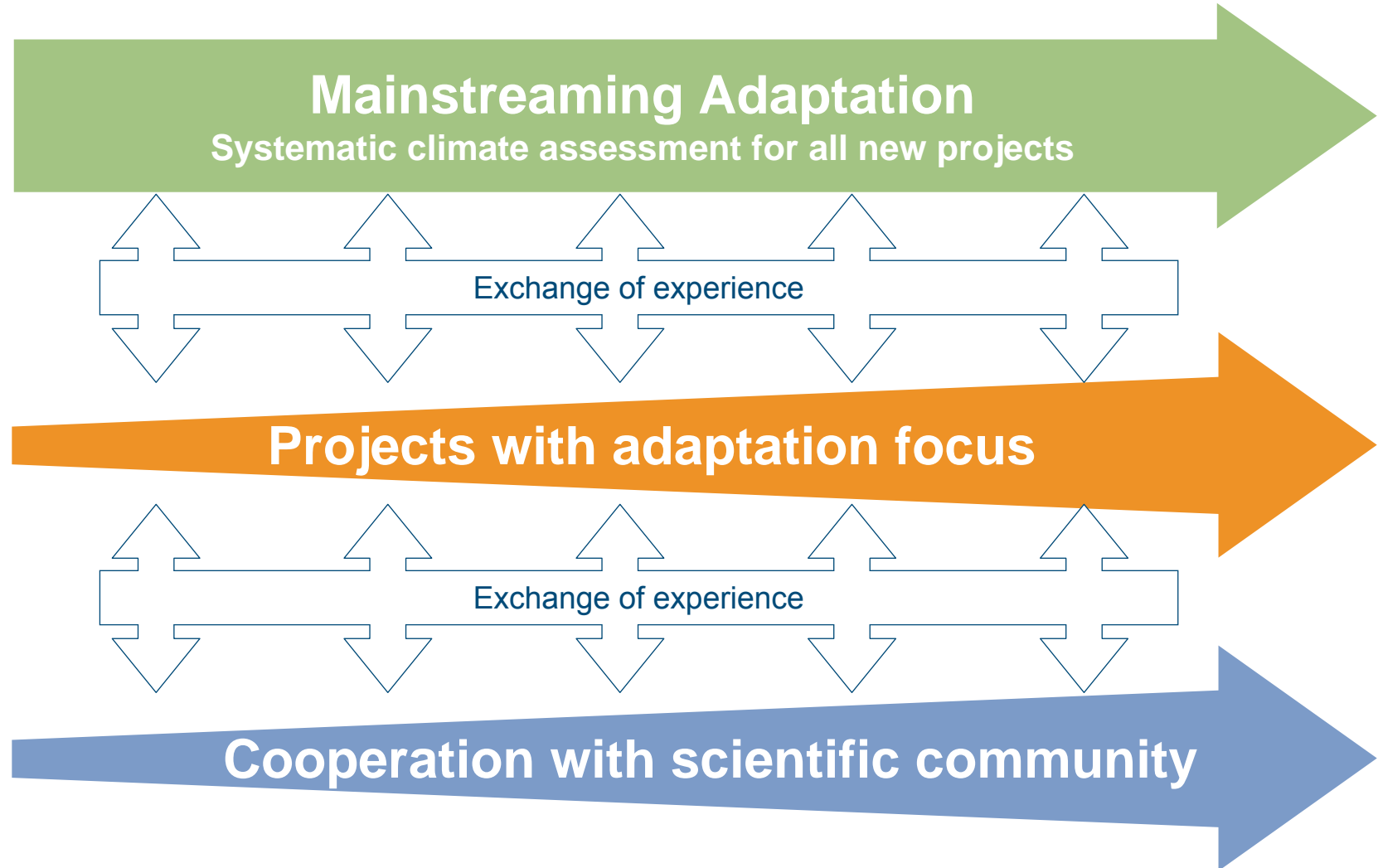
Total New Commitments in 2011: **EUR 4,53 Billion**













# Mainstreaming Adaptation

## Systematic climate change assessment

### Screening

1. Is there a significant dependency on climate parameters?
2. Is there a significant potential for increasing resilience?

- **Step 1:** Is planned project at significant risk of being substantially negatively affected by climate change?

*If the answer is "yes" or "not clear":*

Analysis of climate development

Examination of potential impacts on the project

Climate risk and climate potential analysis

*Need for action*

Identification of adaptation options

Prioritisation and selection of adaptation opportunities

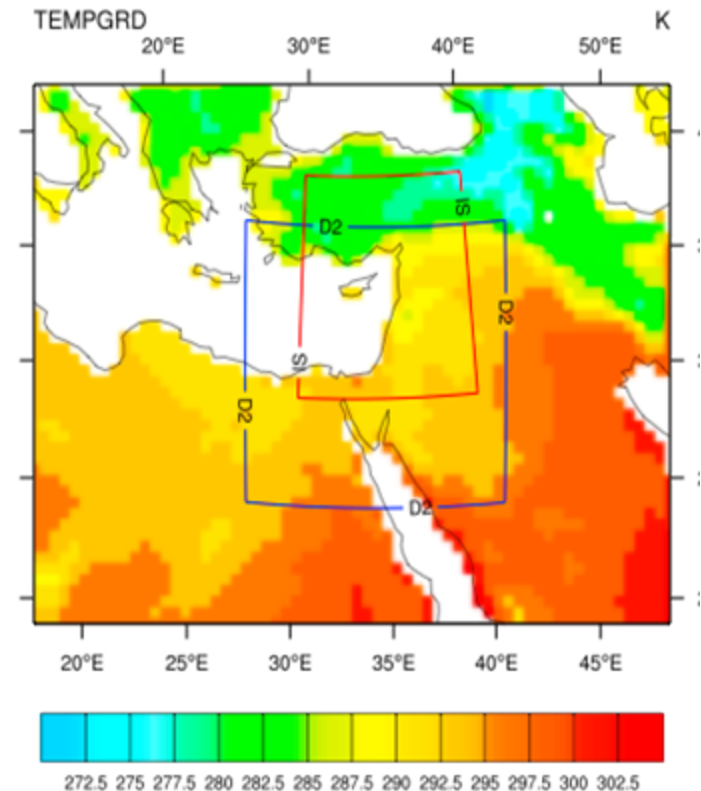
- **Step 2:** Compilation and analysis of the information about the past, current and projected future climate development

- **Outcome:** Identified adaptation activities are integrated into the project → Project "climate proof"

### In-depth Assessment



- KfW works with the scientific community on adaptation methods and concepts in order to guarantee good quality project preparation and implementation
  - Preparation of **Climate Fact Sheets** for selected countries together with the German Climate Service Center (CSC) in Hamburg
  - **Pilot-Network** “Management of Climate Risks” in cooperation with CSC and other scientific institutions (in development)
  - **Regional climate studies**, e.g. in the Nile Equatorial Lakes Region and for the Figeih Spring close to Damascus with KIT (Karlsruhe Institute of Technology)



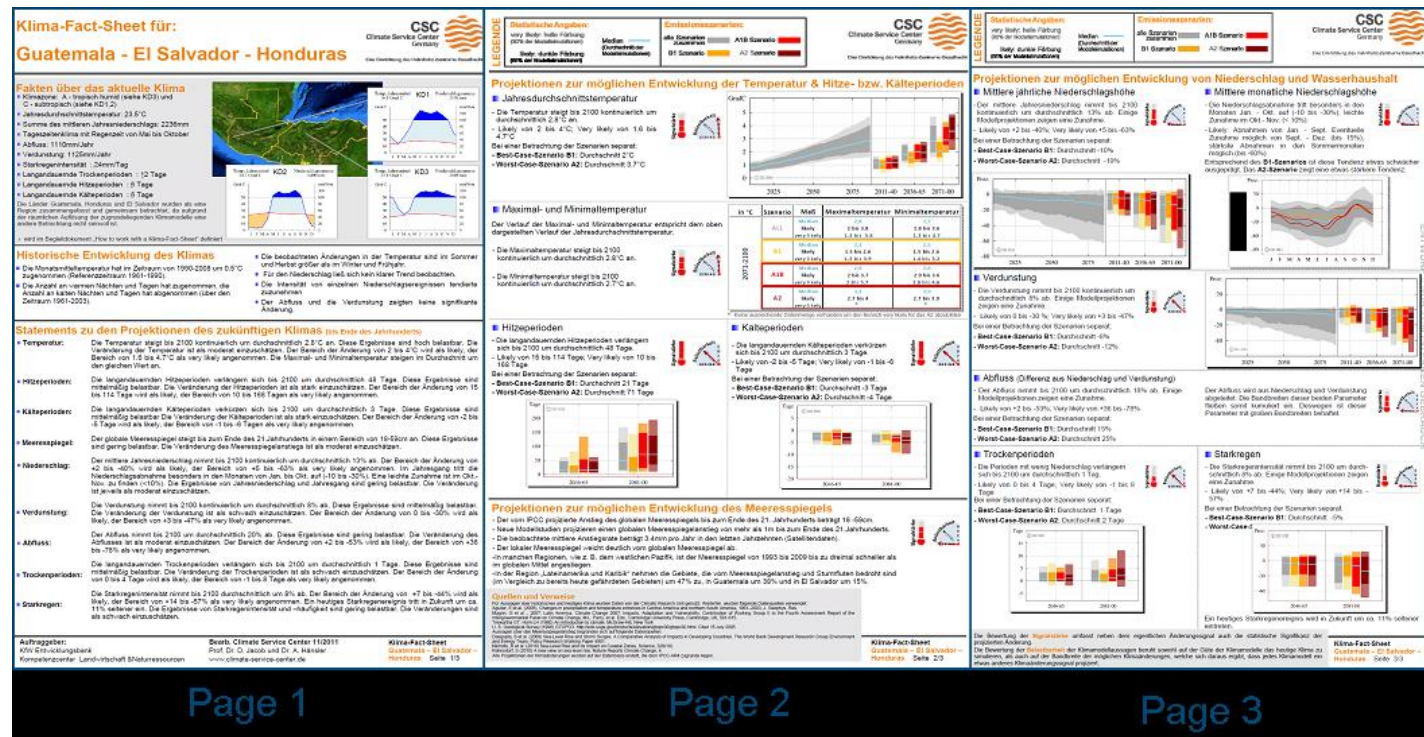


# Practical information for Project Managers – Climate Fact Sheets

- provision of most relevant climate information for planning KfW projects
- Short, clear and plain format (3-7 pages) including information particularly about climate assessment
- Information about single countries or groups of „homogenous“ countries
- Not only description, but also analysis of available information

## Indicators:

- Temperature
- Heat wave
- Cold spell
- Evaporation
- Dry periods
- Heavy rain
- etc.





# Worldwide Commitment (Brochure: Adaptation to Climate Change)

## ADAPTATION TO CLIMATE CHANGE: EXAMPLES OF CHALLENGES AND SUPPORT APPROACHES

Increasing weather extremes and declining precipitation in Northern Africa

KfW supports efficient water usage in cities and in agriculture, as well as coastal protection measures. It is also investigating the introduction of an early warning system for floods and desalination of sea water.

Increasing aridity in the Middle East

KfW promotes the protection of groundwater reserves, the reduction of water losses in towns and cities, as well as the reuse of treated wastewater.

### WEST AFRICA Cooperation with West African Development Bank (BOAD)

Increasing climate variability in Central America

KfW promotes the stabilisation of ecosystems – among other things through improved management of water catchment areas.

Increasing desertification in Eastern Asia

KfW is supporting reforestation projects in China and projects for sustainable management of pasture land, as well as for the renaturation of rivers and forests for safeguarding urban drinking water supplies.

Seasonal water shortages due to glacial melting in the Andes

KfW supports measures to increase irrigation efficiency and reduce water losses in the cities.

Rising sea levels in Southeast Asia

KfW is supporting coastal protection measures and mangrove protection measures (in preparation).

Amazon's biodiversity under threat from climate change

KfW supports improved management of protected areas.

Guatemala City  
Managua

Quito

Bogotá

Lima

La Paz

Brasília

São Paulo

Dakar

Niamey

Algiers

Cotonou

Abuja

Accra

Windhoek

Pretoria

Maputo

Johannesburg

Lusaka

Ulaanbaatar

Kigali

Kinshasa

Nairobi

Dar es Salaam

Addis Ababa

Sana'a

Cairo

Rabat

Amman

Ramallah-Al-Birah

Tirana

Podgorica

Sarajevo

Belgrade

Brussels

Moscow

Kiev

Tbilisi

Ankara

Erzurum

Baku

Tashkent

Kunduz

Mazar-e Sharif

Kabul

New Delhi

Almaty

Ulan Bator

Beijing

Kathmandu

Dhaka

Hanoi

Bangkok

Phnom Penh

Manila

Jakarta

■ Partner countries of Financial Cooperation on behalf of the German Government  
● Regional offices of KfW Entwicklungsbank and DEG

June 2011



# Sahel: Cooperation with West African Development Bank (BOAD)

## Problem

- In the Sahel region of West Africa, climate change is **intensifying droughts and heavy rain** events
  - Resource degradation
  - Declining agricultural productivity
  - Destruction of infrastructure

## Approach

- **Grants to BOAD** (10,6 Mio. EURO) to allow **interest subsidies** for loans in the areas of:
  - Agriculture / Natural resources management
  - Drainage & Flood protection
- **Building up capacity** of BOAD in order to fund national climate adaptation projects
- **Science cooperation** & impact monitoring

## Effects

- Reduced vulnerability of the population through:
  - Adapted resource management
  - Improved food security and nutrition
  - Improvement and protection of infrastructure





# Development of Innovative Finance Instruments:

## Africa Risk Capacity (ARC) *(in development)*



- **Objectives:**

- African-owned, continental index-based weather risk insurance pool and early response mechanism => drought
- provides national governments with immediate cash payments for food security purposes

- **Initial pool capitalisation:** US\$ 300 mio. sought from member countries and donors

- **Initial Partners:** African Union's Department of Rural Economy and Agriculture (AUC), WFP, FAO, US treasury, NOAA, Rockefeller Foundation, DFID, GFDRR and IFAD others

- **Satellite Rainfall Index:**

- Satellite rainfall data have been used to design and rate the rainfall index;
- AUC/WFP designed software ***AfricaRiskView*** used to quantify drought risk by country.

- **Advantages of Pooling Risk:**

- up to 50% savings by each country through risk pooling



# ARC Pool: Key Organisational, Financial and Operational Features

- Use *AfricaRiskView* to set the level of drought risk funding each country wants to insure under ARC Pool and to set premium payable.
- Use *AfricaRiskView* to monitor season and to determine payouts

## Example:

Drought event occurs once every 7years

⇒ country pays 14 % premium ARC

⇒ by international reinsurance market on their own would be 20%

⇒ by holding own reserves they would need twice the pool's capital

ARC Pool Illustrative Layered Risk Retention and Risk Transfer Structure

| FINANCING   | SEVERITY   | FREQUENCY |
|---|--|-----------|
| <b>Risk Transfer -</b><br>Contingent Loans, International<br>Derivative or Reinsurance<br>Markets | E.g. Extreme Drought in<br>Multiple Countries                                    | LOW       |
| <b>ARC Risk Pool.</b> Capital<br>to pay Retained Drought<br>Losses                                | E.g. Extreme Drought in a<br>Country or Medium<br>Droughts in a Few<br>Countries | MEDIUM    |
| <b>Individual Country<br/>Members</b>   | Localised Drought or No<br>Drought   | HIGH      |







Source: ARC Summary Note, ARC Project Team 2011

<http://www.africanriskcapacity.org/>



# Climate Change Policy Based Loans (CCPBL) for NAPs?

- Increasing volumes of internat. climate finance => implementation solely through individual projects difficult
- Trend to...
  - ...sustainable integration of adaptation into strategies and policies of partner countries (PRSPs/NAPs)
  - ...strengthen partner countries' ownership for the implementation of climate strategies
  - ... improve dialogue between partner countries and development partners on climate change

| Criteria of PBAs   | Feasibility/Relevance for NAPs   |
|--|--|
| Leadership by partner country  |  Initiative, development and prioritization by national stakeholders  |
| Consistent, overall program and budget framework   |  Program framework<br> Budget framework   |
| Donor coordination and harmonization in at least 2 of 4 issues:<br>Reporting, budgeting, financial management, procurement         |  Potential given;<br>depends on donor community   |
| Use of partner systems in at least 2 of 4 issues:<br>Program design, implementation, financial management, monitoring & evaluation |  Program design possible<br> Implementation, financial management, monitoring & evaluation |



- Availability and access (open source platform?) to high-quality data (certification /ISO?) for sound mainstreaming of adaptation
- Development of new, innovative approaches and instruments to financing adaptation to climate change
  - ⇒ Risk insurance pools for extreme events
  - ⇒ Climate Change Policy Based Loans (CCPBL) for NAPs?





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**Further Information on Adaptation to Climate Change:**

[http://www.kfw-entwicklungsbank.de/ebank/EN\\_Home/Climate\\_Change/index.jsp](http://www.kfw-entwicklungsbank.de/ebank/EN_Home/Climate_Change/index.jsp)